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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,851	07/16/2004	Susumu Senshu	255147US6PCT	2817
22850	7590	06/24/2010		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER POLTORAK, PIOTR	
			ART UNIT 2434	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/500,851	Applicant(s) SENSHU, SUSUMU	
	Examiner PETER POLTORAK	Art Unit 2434	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/20/10.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-9 and 40-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,6,9 and 40-51 is/are rejected.
- 7) ☒ Claim(s) 5,7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/20/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendments to claims, specification (abstract) received on 4/20/10 have been entered.
2. The IDS received on 4/20/10 has been accepted and references within considered.

Response to Arguments

3. In light of applicant remarks and amendments the objection to the Specification and 35 USC § 112, first paragraph rejection are withdrawn.
4. Applicant arguments, which are directed to the newly presented limitations, are addressed in this Office Action, below.
5. Claims 1, 3, 5-9, and 40-51 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 3, 9, 40 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Okamoto et al US Patent No. 7,310,823 in view of Nakane et al US Patent No. 6,522,609 and Nakano et al US PGPub 2003/0081786 and further in view of Ueda et al US Patent No. 6,289,102.

7. **With regards to claims 1, 9 and 40**, Okamoto teaches a recording system in which an input device and a recording apparatus are connected to each other via a bus (Okamoto, Figure 4 and 5, circuit 41 transfers/retrieves data to/from the circuit 43), said input device comprising determination means for determining whether input content is to be protected by an encryption process when transferred over the bus (Okamoto, column 8 lines 10-13, data to be sent to/retrieved from the circuit 43 to be encrypted as needed), said recording apparatus comprising recording means for recording data (Okamoto, column 11 lines 15-25, unit of 2K bytes) on a recording medium, wherein the content is recorded in the user data (Okamoto, column 10 lines 58-67, content added to recording medium along with control information) and, protection information is recorded in the user control data (Okamoto, column 10 lines 57-67, Figure 6B), the protection information indicating whether the content is to be protected when being transmitted on the bus based on a determination result obtained by said determination means (Okamoto, column 8 lines 10-26). Okamoto fails to teach recording data in a unit of a physical cluster and encrypting using a recording medium key. However, Nakane teaches recording user data interspersed with user control data in a unit of a physical cluster (Nakane, column 11 lines 59-65). Further, Nakano teaches a host device further comprises first encryption means for encrypting the content using a recording medium key of the recording medium (Nakano, paragraphs 0009-0010, one media key is assigned to the recording medium, encryption is executing using the media key). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize

Nakano and Nakane's methods of recording data because it offers the advantage of providing error correction such that defects in the data can be determined and corrected (Nakane, column 1 lines 25-50) and helping maintain compatibility between devices by ensuring that an apparatus with a legitimate device key can obtain a media key from a recording medium (Nakano, paragraph 0011).

8. Okamoto as modified does not disclose that protection information is recorded in the user control data consists of a one-bit flag. However, in the related art, Ueda discloses the protection information consisting of a one-bit flag (a scramble flag field indicates whether data in has been subjected to the scramble-processing (value 1) or not (value 0, Ueda column 14 lines 47-55). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include the one-bit flag in the user control data given the benefit of indicating whether the data is encrypted or not.
9. **With regards to claim 3**, Okamoto as modified teaches the predetermined unit is 2048 bytes content (Okamoto, column 8 lines 28-37).
10. **Claim 6 is rejected under 35 U.S.C. 103(a)** as being unpatentable over Okamoto et al US Patent No. 7,310,823, Nakano et al US PGPub 2003/0081786 and Nakane et al US Patent No. 6,522,609, as applied to claim 1 above, and in further view of Ando et al US Patent No. 7,286,746.
11. **With regards to claim 6**, Okamoto as modified fails to teach each of said input device and said recording apparatus further comprises authentication means for

authenticating each other. However, Ando teaches each of said input device and said recording apparatus further comprises authentication means for authenticating each other (Ando, column 3 lines 39-45). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Ando's method of mutual authentication because it offers the advantage of ensuring that the recording and input devices are known devices which will limit the chances of the exposing of an encryption key (Ando, column 22 lines 30-50).

12. Claims 41-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al US Patent No. 7,310,823, Nakano et al US PGPub 2003/0081786, Nakane et al US Patent No. 6,522,609 and Ueda et al US Patent No. 6,289,102 and in further view Coene et al US PGPub 2002/0157055.

13. With regards to claims 41, 45, 49, Okamoto as modified fails to specifically disclose the physical cluster is grouped into 496 recording frames having 1932 channel bits. However, Coene teaches a physical cluster is grouped into recording frames having channel bits (Coene, paragraphs 0041, 0043, cluster consists of recording frames consisting of channel code). While Coene does not specifically teach 496 recording frames with 1932 channel bits, in light of the Supreme Court's decision in *KSR v Teleflex*, it would have been obvious to one of ordinary skill in the art to use any of these values because the division of a physical cluster into frames and channel bits offers the advantages of helping ensure that data is decoded

correctly through the use of error correction (Coene, paragraphs 0001-0002 and 0007).

14. With regards to claims 42, 46, 50, Okamoto as modified teaches channel bits of a first data set in the physical cluster are set as a synchronizing bit group (Coene, paragraph 0020, channel words are preceded by synchronization pattern).

15. With regards to claims 43, 47, 51, Okamoto as modified fails to teach the physical cluster comprises 42 sets, each set including 45 channel bit data and a one channel bit control data. However, Coene teaches a physical cluster comprises sets, each set including channel bit data and a one channel bit control data (Coene, paragraphs 0007, 0041, 0043, 0020, control information). While Coene does not specifically teach 42 sets, each set including 45 channel bit data, in light of the Supreme Court's decision in *KSR v Teleflex*, it would have been obvious to one of ordinary skill in the art to use any of these values because the division of a physical cluster into frames and channel bits offers the advantages of helping ensure that data is decoded correctly through the use of error correction (Coene, paragraphs 0001-0002 and 0007).

16. With regards to claims 44, 48, Okamoto as modified fails to teach the unit is 2048 bytes. However, Coene discloses a unit is 2048 bytes (Coene, paragraph 0041, 2Kbytes). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize any of these values because the division of a physical cluster into frames and channel bits offers the advantages of helping

ensure that data is decoded correctly through the use of error correction (Coene, paragraphs 0041, 0001-0002 and 0007).

Conclusion

Allowable Subject Matter

Claims 5, 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571)272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PETER POLTORAK/

Examiner, Art Unit 2434

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2434